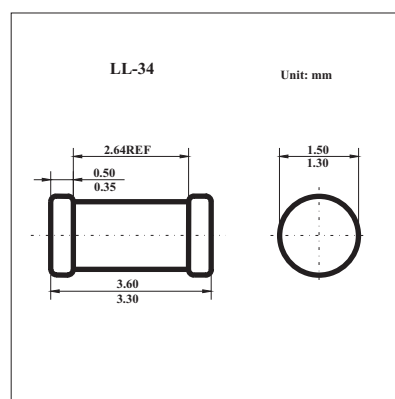


UHF Variable Capacitance Diode

BB215

■ Features

- Excellent linearity
- Matched to 3%
- Small hermetically sealed glass SMD package
- C28: 2 pF; ratio: 8.3
- Low series resistance.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min	Max	Unit
continuous reverse voltage	V_R		30	V
continuous forward current	I_F		20	mA
storage temperature	T_{stg}	-55	+150	$^\circ\text{C}$
operating ambient temperature	T_{amb}	-55	+100	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
reverse current	I_R	$V_R = 28\text{ V}$			10	nA
		$V_R = 28\text{ V}; T_j = 85^\circ\text{C}$			200	
diode series resistance	$V_{BR(R)}$	$f = 470\text{ MHz}; \text{note 1}$			0.75	Ω
diode capacitance	C_d	$V_R = 1\text{ V}; f = 1\text{ MHz}$		16.5	18	pF
		$V_R = 28\text{ V}; f = 1\text{ MHz}$	1.8		2.2	
capacitance ratio	$C_{d(1V)}/C_{d(28V)}$	$f = 1\text{ MHz}$	7.6	8.3		
capacitance matching	$\Delta C_d / C_d$	$V_R = 0.5\text{ to }28\text{ V}$			3	%

Note

1. V_R is the value at which $C_d = 9\text{ pF}$.